U.S. Patent Application No.: 10/750,409 Amendment and Response to Office Action Dated August 15, 2008 Response February 16, 2009

AMENDMENTS TO THE CLAIMS

Prior to further substantive examination, please amend the claims as follows. The following listing of claims will replace all prior versions and listings of claims in the application.

1-20 (Cancelled)

- 21. (Currently amended) An isolated nucleic acid comprising a DNA sequence encoding an infectious RNA molecule a PRRS virus selected from the group consisting of a PRRS virus strain deposited under accession number CNCM I-1102, I-1140, I-1387, ECACC V93070108, ATCC VR 2332, ATCC VR 2385, ATCC VR 2386, ATCC VR 2429, ATCC VR 2474 and ATCC VR 2404, wherein said DNA sequence comprises SEQ ID NO:18 at its the 5' end of the sequence of said PRRS virus strain deposited under accession number CNCM I-1102, I-1140, I-1387, ECACC V93070108, ATCC VR 2332, ATCC VR 2385, ATCC VR 2386, ATCC VR 2429, ATCC VR 2474 and ATCC VR 2404.
- 22. (Currently amended) A transfected host cell comprising transfected with a DNA sequence encoding an infectious RNA molecule encoding a PRRS virus selected from the group consisting of a PRRS virus strain deposited under accession number CNCM I-1102, I-1140, I-1387, ECACC V93070108, ATCC VR 2332, ATCC VR 2385, ATCC VR 2386, ATCC VR 2429, ATCC VR 2474 and ATCC VR 2404, wherein said DNA sequence comprises SEQ ID NO:18 at its the 5' end of the sequence of a PRRS virus strain deposited under accession number CNCM I-1102, I-1140, I-1387, ECACC V93070108, ATCC VR 2332, ATCC VR 2385, ATCC VR 2386, ATCC VR 2429, ATCC VR 2474 and ATCC VR 2332, ATCC VR 2385, ATCC VR 2386, ATCC VR 2429, ATCC VR 2474 and ATCC VR 2404, which wherein said transfected host cell is capable of expressing expresses the encoded PRRS virus.

23. (Cancelled)

Attorney Docket No. 02950-20438US02

U.S. Patent Application No.: 10/750,409 Amendment and Response to Office Action Dated August 15, 2008 Response February 16, 2009

24. (Currently Amended) An isolated nucleic acid in the form of a plasmid comprising the isolated nucleic acid of claim 21 wherein said isolated nucleic acid comprises a DNA sequence encoding an infectious RNA molecule encoding a PRRS

25. (Currently Amended) An isolated infectious RNA molecule encoded by an isolated nucleic acid comprising sequence that encodes a PRRS virus strain deposited under accession number CNCM I-1102, I-1140, I-1387, ECACC V93070108, ATCC VR

virus, wherein said DNA sequence comprises SEQ ID NO:18 at its 5' end.

2332, ATCC VR 2385, ATCC VR 2386, ATCC VR 2429, ATCC VR 2474 and ATCC VR

2404 wherein the nucleic acid comprises a sequence of SEQ ID NO:18 at its 5' end

which infectious RNA molecule encodes a PRRS virus.

26. (Currently Amended) A recombinant PRRS virus encoded by an isolated nucleic acid comprising a DNA sequence encoding an infectious RNA molecule encoding a PRSS virus, wherein said DNA sequence comprises SEQ ID No:18 at its 5' end that encodes a PRRS virus strain deposited under accession number CNCM I-102, I-1140, I-1387, ECACC V93070108, ATCC VR 2332, ATCC VR 2385, ATCC VR 2386, ATCC VR 2429, ATCC VR 2474 and ATCC VR 2404 wherein the nucleic acid comprises a sequence of SEQ ID NO:18 at its 5' end, wherein presence of the sequence of SEQ ID NO:18 at the 5' end of said PRRS virus strain sequence renders said recombinant PRRS virus infectious.

27. (cancelled).

28. (Currently Amended) The transfected host cell of claim 22 wherein said host cell is not transfected by a nucleic acid encoding a wildtype PRRS virus strain deposited under accession number CNCM I-1102, I-1140, I-1387, ECACC V93070108, ATCC VR 2332, ATCC VR 2385, ATCC VR 2386, ATCC VR 2429, ATCC VR 2474 and ATCC VR 2404 that does not contain a sequence of SEQ ID NO:18 at its 5' end being incapable of infection by wild-type PRRS virus.

3

Attorney Docket No. 02950-20438US02

U.S. Patent Application No.: 10/750,409 Amendment and Response to Office Action Dated August 15, 2008 Response February 16, 2009

29. (Cancelled)

30. (Currently Amended) The isolated infectious RNA molecule of claim 25, said encoded PRRS virus being expressed in a host cell that is not susceptible to infection by wild-type PRRS virus wherein the sequence of SEQ ID NO:18 at the 5' end of said nucleic acid that encodes a PRRS virus strain deposited under accession number CNCM I-1102, I-1140, I-1387, ECACC V93070108, ATCC VR 2332, ATCC VR 2385, ATCC VR 2386, ATCC VR 2429, ATCC VR 2474 and ATCC VR 2404 sequence renders said RNA molecule infectious.

31. (cancelled)

- 32. (new) An isolated nucleic acid comprising a DNA sequence encoding an infectious RNA molecule encoding a North American PRRS virus wherein said DNA sequence comprises SEQ ID NO:24 or a sequence that hybridizes to the complement of SEQ ID NO:24 under conditions comprising hybridization to a filter bound DNA in 0.5M NaHPO4 7% SDS, 1mM EDTA at 65°C and washing in 0.1%SSC/0.1%SDS at 68°C, wherein said isolated sequence comprises a sequence of SEQ ID NO:18 at its 5' end.
- 33. (new) The isolated infectious RNA of claim 25, wherein said nucleic acid comprises said recombinant nucleic acid comprises at least one nucleic acid sequence encoding a virulence marker and/or a serological marker particular to said wild-type RNA virus that has been modified by cloning techniques to effect a change in the virulence and/or a change in the serological immune response to said infectious RNA molecule.
- 34. (new) The isolated infectious RNA of claim 33 wherein the nucleic acid sequence encoding a virulence marker and/or serological marker is located within an open reading frame that encodes a structural protein of said virus.
- 35. (new) The isolated infectious RNA of claim 34 wherein said open reading frame is ORF7.

U.S. Patent Application No.: 10/750,409 Amendment and Response to Office Action Dated August 15, 2008 Response February 16, 2009

- 36. (new) The isolated infectious RNA of claim 33 wherein said nucleic acid further comprises at least one additional heterologous nucleic acid sequence.
- 37. (new) The isolated infectious RNA of claim 36 wherein said heterologous nucleic acid encodes an antigen for stimulating an immune response in pigs.